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| FOLEY HOAG, LLP | | | TRUONG, LAN DAI T | |
| PATENT GROUP, WORLD TRADE CENTER WEST 155 SEAPORT BLVD BOSTON, MA 02110 | | | ART UNIT | PAPER NUMBER |
| | | | 2143 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|--|---|---|--|--|--|
| | 10/043,370 | FIRLIE, BRADLEY M. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | lan dai thi truong | 2143 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE! | I. lely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| Responsive to communication(s) filed on <u>09 January 2002</u>. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-67 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-67 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | wn from consideration. | | | | |
| Application Papers | | | | | |
| 9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 09 January 2002 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex | a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d). | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 06/25/02. | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | | | | |

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DETAILED ACTION

Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or descry bed as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1) Claims 1, 18-19, 33, 38, 39, 45, 50, 63 and 67 are rejected under 35 U.S.C 103(a) as being un-patentable over Kraft et al. (U.S. 6,112,225) in view of Stamm et al. (U.S. 6,711,616)

Regarding to claims 1, 19, 39, 45, and 50 which is exemplary with claims 18, 33, 38, 63 and 67:

Kraft discloses the invention substantially as claimed, including a method and computer program, which can be implemented in a computer hardware or software code for distributed computing, comprising:

Sending from a server to a task processing module, a request to process a task:

("coordinating computer" which is equivalent to "server": abstract, lines 1-26; column 4, lines
48-61)

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Receiving the task at the task processing module: ("task scheduler" which is equivalent to "the task processing module": abstract, lines 1-26; column 4, lines 48-67)

decomposing the task into a plurality of subtasks: (task scheduler devides the aggregate task into independent subparts and allocates the subtasks among the peripheral computers: abstract, lines 1-26; column 4, lines 48-67)

Returning the subtasks to the server: (when the peripheral computers finish its subtasks, they transmit all results back to the coordinating computer for compiling: abstract, lines 1-26)

Distributing the subtasks from the server to processors: ("peripheral computers" which equivalent to "processors": abstract, lines 1-26)

Receiving the subtasks at the processors: (abstract: lines 1-26)

Notifying the server that the results for the subtasks are obtained: (abstract: lines 1-26)

Combining the results of the subtasks to obtain a task result: (abstract: lines 1-26)

Obtaining at the processors the code from a code source when the code does not exist at the processors: (column 6, lines 15-67)

Executing at the processors the code to obtain results for the subtasks: (column 6, lines 15-67)

However, Kraft does not explicitly disclose determining at the processors if data exists at the processors for the subtasks received; obtaining at the processors the data from a data source when the data does not exist at the processors

Stamm discloses a system for distributing computing tasks for execution among a plurality of processing systems having different resources characteristics or the processing

system may access a database for resource information, see (Stamm: abstract, lines 8-11; column 3, lines 11-20; column 4, lines 35-43; column 5, lines 26-31)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Stamm's ideas of the processing systems their own resources or access the data for requesting resources with Kraft's system in order to create a providing sufficient computing resources system, see (column 1, lines 35-42)

2) Claims 2-4, 22-24, 40 and 51-53 are rejected under 35 U.S.C 103(a) as being unpatentable over Kraft-Stamm in view of Zweben et al. (U.S. 6,216,109)

Regarding to claims 2-3, 22-23, 40 and 51-52:

Kraft-Stamm discloses the invention substantially as disclosed in claims 1, 19, 39 and 50, but does not explicitly teach maintaining updated versions of at least one of system parameters, processing code and system operation code at the task processing module

However, Zweben scheduling system can be easily modified to add or delete subtasks: abstract, lines 1-26; column 6, lines 52-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Zweben's ideas of modifying scheduling system such as adding or deleting subtasks with Kraft-Stamm's system in order to speed up operation, see (abstract, lines 15-26)

Regarding to claim 4, 24 and 53:

In addition to rejection in claims 1 and 19, and 50, Kraft-Stamm- Zweben further discloses wherein receiving the subtasks at the processors comprises checking system parameters

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to determine if the server is an approved server: (Kraft discloses method of requiring digital signatures for importing tasks: column 10, lines 22-27).

3) Claims 5-6, 9, 25-26, 29, 41, 46, 54-55 and 58 are rejected under 35 U.S.C 103(a) as being un-patentable over Kraft-Stamm in view of DeBenedictis et al. (U.S. 6,144,984)

Regarding to claims 5-6, 9, 25-26, 41, 46 and 54-55:

Kraft-Stamm discloses the invention substantially as disclosed in claims 1, 19, 39, 45 and 50, but does not explicitly teach wherein sending the request to process a task comprises forming a dynamically linked library having links to at least one of processing code, code sources, data, data sources and results storage files

However, DeBenedictis discloses a dynamically linked library of addresses and source codes for subtasks processing, see (abstract, lines 1-10; column 22, lines 26-51)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine DeBenedictis's ideas of using a dynamically linked library of addresses and source codes to process subtasks with Kraft-Stamm's system in order to increase speed, see (DeBenedictis: abstract, lines 1-10)

Regarding to claims 9, 14, 29 and 58:

Kraft-Stamm- DeBenedictis discloses the invention substantially as disclosed in claim 1, which further discloses the configuration sets comprises maintaining a list of processor available to execute the code to obtain the results for the subtasks, see (Kraft: abstract, lines 1-26)

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4) Claims 7-8, 10, 15 and 27-28, 34, 56-57, 59 and 64 are rejected under 35 U.S.C 103(a) as being un-patentable over Kraft-Stamm-DeBenedictis in view of Zweben et al. (U.S. 6,216,109):

Regarding to claims 7-8, 10, 15, 27-28, 34, 56-57, 59 and 64:

Kraft-Stamm discloses the invention substantially as disclosed in claims 6, 9, 14, 19 and 50, but does not explicitly teach the configuration sets comprises identifying at least one of subtask processing limits, boundary limits for the data, iteration limits and a number of processors desired for processing,

However, Zweben discloses method of adding and deleting tasks for scheduling a manufacturing operation, see (Zweben: Column 1, lines 40-44, column 2, lines 18-31)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Zweben's ideas of adding and deleting tasks for scheduling a manufacturing operation with Kraft-Stamm- DeBenedictis's system in order provide efficiency tasks schedule for an operation (Zweben: abstract, lines 7-11)

5) Claims 11-13, 30-32, 42-44, 47-49 and 60-62 are rejected under 35 U.S.C 103(a) as being un-patentable over Kraft-Stamm in view of Ferguson (U.S. 6,052,555)

Regarding to claim 11-13, 30-32, 42-44, 47-49 and 60-62:

Kraft-Stamm discloses the invention substantially as disclosed in claims 1, 19, 39, 45 and 50, but does not explicitly teach returning the subtasks comprises compressing files corresponding to the subtasks

However, Ferguson discloses method of reconstructing compressed video/audio stream from collected compressed video/audio frames, see (Ferguson: abstract, lines 1-19)

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Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Ferguson's ideas of using compressed signals with Kraft-Stamm's system in order increase transmission speed (Ferguson: column 1, lines 15-42)

6) Claims 16, 35 and 65 are rejected under 35 U.S.C 103(a) as being un-patentable over Kraft-Stamm in view of Karlak (U.S. 2002/0023175)

Regarding to claims 16, 35 and 65:

Kraft-Stamm discloses the invention substantially as disclosed in claims 1 and 19 but does not explicitly teach_monitoring the processors; and redistributing the subtasks when executing at the processors is delayed

However, Karlak discloses method of reassigning the subtasks, see (Karlak: [0013])

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Karlak's ideas of reassigning the subtasks with Kraft-Stamm's system in order to control correctly tasks performance: (Karlak: [0013])

7) Claims 17, 36 and 66 are rejected under 35 U.S.C 103(a) as being un-patentable over Kraft-Stamm-Karlak in view of Saxena et al. (U.S. 6,377,928)

Regarding to claims 17, 36 and 66:

Kraft-Stamm discloses the invention substantially as disclosed in claims 16,19 and 50, but does not explicitly teach wherein monitoring comprises: accessing the server from a remote site; and initiating a browser application within the server, the browser application providing remote monitoring functionality, see

However, Saxena discloses browser task, see (Saxena: column 5, lines 1-67)

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Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Saxena's ideas of reassigning the subtasks with Kraft-Stamm-Karlak's system in order to control correctly tasks performance: (Karlak: [0013])

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to lan dai thi truong whose telephone number is 571-272-7959. The examiner can normally be reached on monday- friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Dai Thi Truong Examiner Art Unit 2143

Ldt 01/30/2006

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100